

Amendments to the Specification:

Please replace the paragraph at page 6, lines 21-30 with the following amended paragraph:

A pipe of a gas supplying system is connected to the gas-introducing-pipe portion 3. A pipe of a gas discharging system including a vacuum pump and/or a pressure controlling valve or the like, which is capable of ~~reduce~~ reducing and ~~control~~ controlling a pressure in the reaction tube 2, is connected to the gas-discharging-pipe portion 4 (omitted in the drawings). In addition, a cylindrical heater 8 is provided around the reaction tube 2 in such a manner that the inside of the reaction tube 2 can be heated and controlled to a predetermined temperature of for example 300 to 1200° C.

Please replace the paragraph at page 6, line 31 to page 7, line 1 with the following amended paragraph:

The manifold 5 at the lower end of the reaction tube 2 forms a furnace opening 6 of the thermal processing furnace. Under the thermal processing furnace, a lid 7 that opens and closes the furnace opening 6 is provided to be moved up and down by an elevating mechanism & 30. The lid 7 is adapted to butt against an open end of the manifold 5 to hermetically close the furnace opening 6.

Please replace the paragraph at page 7, lines 2-11 with the following amended paragraph:

A boat for a thermal process 9 that supports a large number (for example, about 75 to 100) of large-diameter (for example, 300 mm in diameter) wafers W horizontally in a tier-like manner at intervals in a vertical direction is placed on the lid 7 via a heat retaining cylinder 10 that is a furnace-opening heat-insulating means. When the lid 7 is moved up by the elevating mechanism 8 30, the boat 9 is adapted to be loaded (conveyed) in the reaction tube 2. When the lid 7 is moved down, the boat 9 is adapted to be unloaded (conveyed out) from the reaction tube 2.